

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF AN EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 AND MECHANICS VALLEY ROAD IN CECIL COUNTY. US 40 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION. MODIFICATION IS DUE TO GEOMETRIC CHANGES ALONG THE NORTH LEG OF MECHANICS VALLEY ROAD. SIDE STREET SPLIT PHASING WILL OCCUR AS WELL AS DETECTION REPLACEMENT.

INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH A EXCLUSIVE LEFT TURN PHASES FOR E.B. AND W.B. US 40 AND THIS WILL NOT CHANGE. THE SIDE STREETS, HOWEVER, WILL BE CHANGED TO SPLIT PHASE. VIDEO DETECTION CAMERA WILL BE INSTALLED FOR THE S.B. MECHANICS VALLEY RD APPROACH. THE EXISTING FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER AND NEMA "6" CABINET WILL REMAIN THE SAME.

PHASE CHART

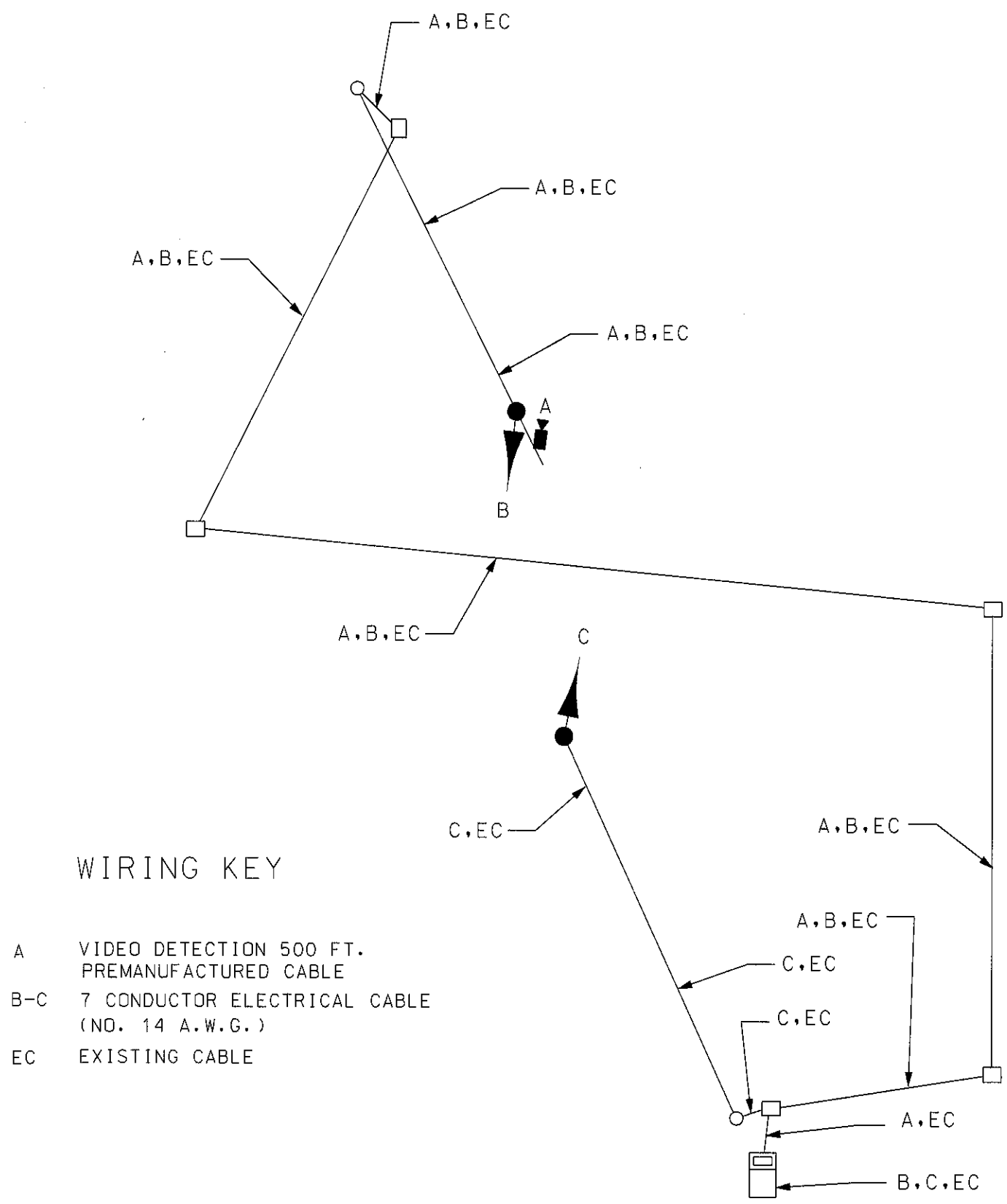
	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 & 5	<G-	<G-	RS	RS	<G-	<G-	RS	RS	R	R	R	R
1 & 5 CHANGE	PHASE 1 & 5 CHANGE MAY CHANGE TO PHASE 1 & 6, 2 & 5 OR 2 & 6											
PHASE 1 & 6	<G-	<G-	G	G	<R-	<R-	RS	RS	R	R	R	R
1 & 6 CHANGE	<Y-	<Y-	G	G	<R-	<R-	RS	RS	R	R	R	R
PHASE 2 & 5	<R-	<R-	RS	RS	<G-	<G-	G	G	R	R	R	R
2 & 5 CHANGE	<R-	<R-	RS	RS	<Y-	<Y-	G	G	R	R	R	R
PHASE 2 & 6	<R-	<R-	G	G	<R-	<R-	G	G	R	R	R	R
2 & 6 CHANGE	<R-	<R-	Y	Y	<R-	<R-	Y	Y	R	R	R	R
PHASE 3	<R-	<R-	RS	RS	<R-	<R-	RS	RS	G	G	R	R
3 CHANGE	<R-	<R-	RS	RS	<R-	<R-	RS	RS	Y	Y	R	R
PHASE 4	<R-	<R-	RS	RS	<R-	<R-	RS	RS	R	R	G	G
4 CHANGE	<R-	<R-	RS	RS	<R-	<R-	RS	RS	R	R	Y	Y
FLASHING OPERATION	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR
ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO QOTS FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
5001	2 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW (ALL DIRECTIONS)
5001	4 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW (LEFT)
5001	4 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING ARROW (RIGHT)
5002	12 EA	FURNISH AND INSTALL HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING LETTER
5005	40 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5007	950 LF	FURNISH AND INSTALL 5 IN. YELLOW HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5006	500 LF	FURNISH AND INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
5008	760 LF	REMOVAL OF EXISTING PAVEMENT LINE MARKING - ANY WIDTH
8003	1 EA	FURNISH AND INSTALL 500 FT. VIDEO CABLE TO CONTROLLER
8011	8 EA	FURNISH AND INSTALL 12 IN. VEHICULAR SIGNAL HEAD SECTION
8048	LS	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8049	1 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
8050	1 EA	FURNISH AND INSTALL VIDEO DETECTION INTERFACE EQUIPMENT
8058	48 LF	FURNISH AND INSTALL 4 IN. X 4 IN. WOOD SUPPORT
8085	540 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO. 14 AWG
---	1 EA	FURNISH AND INSTALL R1-2 SIGN (30" X 30") GROUND MOUNT
---	1 EA	FURNISH AND INSTALL R3-6(L) SIGN (30" X 36") MAST ARM MOUNT
---	1 EA	FURNISH AND INSTALL R3-8(MOD.) SIGN (36" X 36") MAST ARM MOUNT
---	360 LF	FURNISH AND INSTALL 10 IN. WHITE HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
---	30 LF	FURNISH AND INSTALL 10 IN. YELLOW HEAT APPLIED PERMANENT THERMOPLASTIC PAVEMENT MARKING
---	2 EA	FURNISH AND INSTALL R3-7 SIGN (30" X 30") GROUND MOUNT

WIRING DIAGRAM



EQUIPMENT LIST "A"

A. APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

CONTACT PERSONS FOR DISTRICT 2 ARE AS FOLLOWS:

MR. ROBERT KIEL
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 778-3061

MR. TERRY WRIGHT
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 778-3061

MR. BARRY CLOTHIER
ASSISTANT DISTRICT ENGINEER - UTILITIES
(410) 778-3061

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

ALL SIGNAL EQUIPMENT TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101
FAX (410) 923-6473 EMAIL TRACONCEPT@AOL.COM

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
GENERAL INFORMATION
US 40 AND MECHANICS VALLEY ROAD

DRAWN BY: M.HOWELL	F.A.P. NO. 1895-F	TS NO.	SHEET NO. 3 OF 3
CHECKED BY: T.ZAYDEL	S.H.A. NO.	T.I.M.S. NO.	
SCALE: 1" = 20'	COUNTY: CECIL	F990	
DATE: 11-03	LOG MILE:		